

CAUTION:

Prolonged exposure to sound pressure levels in excess of 100dB has been shown to contribute to permanent hearing loss and tinitis. Diamond's high performance speakers can exceed this level. Please exercise restraint in their operation.

LIMITED WARRANTY STATEMENT

Diamond Audio Technology, Inc. (DAT) warrants all DAT products to be free of defects in material and workmanship for a period of one (1) year from the date of original purchase provided they are purchased from an authorized DAT retailer in the United States. However, the effective warranty period will be three (3) years if the products were purchased from and installed by an authorized DAT retailer.

What is covered: Parts and labor to effect repair or, at the sole discretion of DAT, replacement of either any malfunctioning or defective part(s) or the entire system should the system or any component part(s) thereof fail to perform as designed. Includes return freight via ground transportation to destinations within the United States.

What is NOT covered: Installation or setup and repair or replacement of the system or any parts thereof which, in DAT's judgment, fail or become damaged as a result of negligence, improper use, abuse, unauthorized modification or service, improper or inadequate packaging during shipment, installation by a non-authorized dealer, accident, or use for any purpose other than those for which this product was originally intended, or where the model's serial number has been removed, altered or defaced.

Who is covered: Original purchaser so long as they reside in the United States and can provide proof of the original date of purchase (e.g., store receipt) from an authorized DAT retailer.

OUTSIDE THE UNITED STATES: Customers outside the United States should contact their local sales office to obtain information on prices, exchange unit availability, instructions, service and warranty/non-warranty repairs.

Repair or replacement under this warranty is the exclusive remedy of the consumer. DAT shall not be liable for any incidental or consequential damages for breach of any expressed or implied warranty on this product. Except to the extent prohibited by applicable law, any implied warranty of merchantability or fitness for a particular purpose on this product is limited in duration to the duration of this warranty. Some states do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights that may vary from state to state.

How to obtain warranty service: In the event a DAT product should require servicing, you should (a) visit an authorized DAT retailer or (b) call the DAT Service Dept. at (866) 328 2834. To be eligible for warranty service within a three (3) year period, the accompanying receipt of original purchase from an authorized DAT retailer must specifically note that dealer installation was provided.

Product returned for repair/service must be properly packaged and clearly marked with the Return Authorization (RA) number issued by DAT. If the RA number is not clearly marked on the package or no RA number was issued by DAT, the product may be refused upon delivery. DAT does not assume responsibility for lost or misdirected product.

<http://www.diamondaudio.com>



DIAMOND™
AUDIO TECHNOLOGY

M6 SUBWOOFER OWNER'S MANUAL

M6 10D2 - M6 10D4
M6 12D2 - M6 12D4

<http://www.diamondaudio.com>

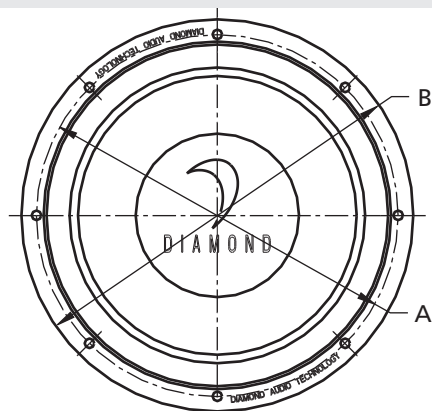
FEATURES

Titanium Magnesium Alloy Cone - High rigidity, smooth linear response
 Die-cast Alloy Chassis - High strength maintains critical parts alignment
 NBR Rubber Surround - Durable at environmental extremes. Large roll allows long stroke
 Machined Backplate/Pole - Precision engineered to exacting tolerance
 Aluminum VC Former - 400% stronger than Kapton®, excellent heat transfer
 3" Dia. Pure Copper Coil - 4-layer design. High thermal/current capacity for high power handling.
 Mirror Image Dual Nomex® Spiders with woven lead wires -Enormous controlled excursion, ultimate durability, no lead slap.
 3-Year Warranty - If purchased from and installed by an Authorized Diamond Retailer.

DIMENSIONS AND VOLUMES

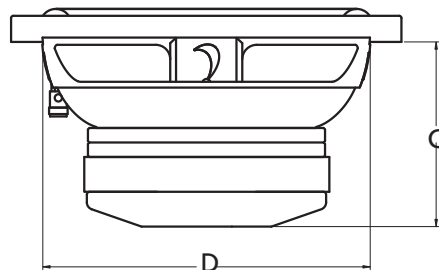
METRIC DIMENSIONS

DIMENSION	M6 10	M6 12
A (bolt circle diameter)	246mm	294mm
B (outside diameter)	270mm	320mm
C (height)	138mm	150mm
D(Thru Hole diameter)	228mm	276mm
Displacement	2.63 L	3.33L



IMPERIAL DIMENSIONS

DIMENSION	M6 10	M6 12
A (bolt circle diameter)	9.685"	11.575"
B (outside diameter)	10.629"	12.598"
C (height)	5.433"	5.905"
D(Thru Hole diameter)	8.976"	10.866"
Displacement	0.093 ft³	0.117ft³



INSTALLATION

The installations and enclosures shown in this manual are offered as a suggestion only. Since enclosure design is as important to sound quality as the speaker itself, it is recommended that your Authorized Diamond Retailer assist you in designing and building an enclosure to suit your vehicle. For more information on selecting the best subwoofer enclosure, consult the "FAQ" page of our web site, www.diamondaudio.com

TECHNICAL SPECIFICATIONS

The information below is provided to enable custom enclosure design and is intended for professional use only. Please consult your Authorized Diamond Retailer for an enclosure which best suits your requirements.

THIELE/SMALL PARAMETERS

	M6 10D2	M6 10D4	M6 12D2	M6 12D4
Impedance (ohm)	4*	8*	4*	8*
SPL 1w/1m(dB)	84.5	84.5	86	86
Qes	0.54	0.55	0.55	0.54
Qts	0.49	0.50	0.49	0.49
Fs (Hz)	32.0	33.0	31.0	32.0
Vas (L)	14.6	13.9	30.3	28.9
Cms (mm/N)	0.095	0.090	0.087	0.083
Mms (g)	296	267	311	298
Sd (M²)	0.033	0.033	0.0497	0.0497
BL (T·M)	18.5	24.8	19.0	26.2
Re	3.3	6.2	3.3	6.2
Xmax (mm)	15	16	15	16

*parameters shown are with voice coils wired in series

RECOMMENDED ENCLOSURES

Diamond's M6 Series subwoofers are primarily designed for use with small sealed enclosures. Good results have also been achieved in vented and bandpass enclosures. Although "free-air" (infinite-baffle) applications are NOT recommended, they may be used successfully in low-power systems (e.g., 75W or less per sub). HIGH PASS ("SUBSONIC") FILTERS MUST BE USED WITH NON-SEALED APPLICATIONS TO PREVENT OVER-EXCURSION AT INFRASONIC FREQUENCIES. The enclosure volumes shown below are NET INTERNAL VOLUMES. Driver, vent and brace displacement must be taken into account when designing your enclosure.

	M6 10D2	M6 10D4	M6 12D2	M6 12D4
SEALED ENCLOSURE				
Vb (Net vol ft³)	.75~.3	.75~.3	1.75~.6	1.75~.6
F3 (Hz)	42~37	42~37	44~35	44~35
Pe (Watts)	800~600	800~600	800~600	800~600
Qtc (@ max pwr)	0.9~1.2	0.9~1.2	0.9~1.2	0.9~1.2
VENTED ENCLOSURE				
Vb (Net vol ft³)	0.75	0.75	1.5	1.5
F3 (Hz)	33	33	35	35
Fb (Tuning freq.)	32	32	31	31
Pe (Watts)	600	600	600	600
Ports	2	2	1	1
Port I.D.	2"	2"	4"	4"
Port Length	20"	20"	18"	18"